ENVIRONMENTAL ENGINEER I

DEFINITION

Under supervision, performs a broad range of entry level engineering assignments requiring the application of public health, environmental, and civil engineering principles, practices, and theories; evaluates proposed and existing projects, facilities, and development for compliance with public health and environmental statutes, ordinances, codes and regulations; and performs related work as required.

EXPERIENCE AND TRAINING REQUIREMENTS

Graduation from an accredited college or university with a Bachelor's degree in Civil Engineering, Hydrology, Sanitary Engineering, Environmental Engineering or a closely related field; OR an equivalent combination of education and experience.

LICENSE OR CERTIFICATE

A valid driver's license.

DISTINGUISHING CHARACTERISTICS

This is the entry level in the Environmental Engineering class series. Incumbents perform evaluations of proposed and existing projects, facilities, and development for compliance with public health and environmental requirements. This class is distinguished from Environmental Engineer II in that the incumbents in the Environmental Engineer II class perform more complex and specialized job assignments.

SUPERVISION EXERCISED

NA

EXAMPLES OF DUTIES
(The following is used as a partial description and is not restrictive as to duties required.)

Conduct office and field reviews and evaluations for projects and development including subdivisions, parcel maps, construction projects, grading permits, individual residences, variances, special use permits, structure moving, on-site sewage and liquid waste disposal facilities, trailer and mobile home parks, hotels and motels, institutions, swimming pools and spas, drinking water supply systems, waste management facilities and systems, air pollution sources, noise and odor sources, and other construction and facilities for compliance with applicable environmental and public health laws, rules, and regulations.

Consult with registered professional engineers on the operation and maintenance of water systems.

Review engineering construction drawings for water systems and sewer systems.

Check plans for well drilling and issue permits.

May perform project field management of water resources capital projects.

Review and recommend the issue or denial of permits, determining if proposed facilities meet the District's "Best Available Control Technology" requirements.
Maintain, repair, replace, and install general hydrological and meteorological equipment.

Review building permits for compliance with Water Resource Department requirements and regulations, including fees due.

Make computations and calculations regarding design of water, wastewater and air pollution control systems and industrial processes to determine actual and projected pollution emission rates and the Lowest Achievable Emission Rate.

Collect samples, testing and analyzing data to determine if facilities meet air, water, and wastewater pollution control requirements.

Assist with advising developers, contractors, business operators, and pollution sources on remedial measures necessary for compliance with regulations and standards, determining effectiveness of control technology and recommending operational changes.

Assist with drafting environmental regulations, researching Federal, State and other local entities' regulations, assessing feasibility of proposed standards and presenting recommendations to Department management, the District Board of Health, and community groups.

May serve as an expert witness on environmental engineering issues before courts, elected boards, councils, commissions, and advisory boards.

Use computer software to perform engineering calculations and record and analyze data, developing and maintaining databases.

Prepare trend graphs and models to predict ambient air pollution levels.

Prepare and write reports and correspondence.

Make presentations to Federal, State, and local agencies, elected officials, special interest groups, business and industry, and community organizations.

**JOB RELATED AND ESSENTIAL QUALIFICATIONS**

**Full Performance** *(These may be acquired on the job and are needed to perform the work assigned.)*

**Knowledge of:**
Washoe County District Health Department regulations pertaining to public health and pollution control issues.

Water Resource Department and AWWA regulations pertaining to water and sewer system design.

Instrumentation and testing procedures.

Industrial design and operating processes.

Division policies and procedures.

Computer software specific to the Department.

Hydraulics, hydrology, and geology.

Water and wastewater collection, treatment, distribution, reclamation, and disposal.

Soil mechanics, bacteriology, and water chemistry.
Sources of air pollution and air pollution control technology.

**Ability to:**
Perform a broad range of complex specialized environmental engineering assignments related to public health and pollution control programs.

Assist the general public with questions about water and sewer facility locations and procedures and fees for connection to water and sewer.

Perform modeling of water systems and take results, in conjunction with engineers, design or review water system plans.

Interpret and apply laws, codes, and regulations, policies, and procedures pertaining to a variety of environmental health and pollution control programs.

**Entry Level** *(Applicants will be screened for possession of these through written, oral, performance, or other evaluation methods.)*

**Knowledge of:**
Engineering practices and principles as applied to environmental health and pollution control as well as water and sewer system design.

Engineering mathematics, including calculus, trigonometry, geometry, and algebra.

**Ability to:**
Analyze and interpret technical reports, graphs, charts, and drawing.

Perform complex engineering calculations.

Interpret and apply laws, codes, and regulations, policies, and procedures pertaining to a broad range of public and environmental health and pollution control programs.

Communicate effectively, both orally and in writing.

Maintain effective working relationships with contractors, the general public, Department staff, and representatives of other departments.

**SPECIAL REQUIREMENTS**
*Essential duties require the following physical skills and work environment.*

Ability to sit for extended periods. Ability to frequently stand, walk, stoop, climb, and kneel. Ability to lift and move objects weighing up to 25 lbs. Ability to use office equipment including computer, copiers, telephone, and FAX machine. Ability to work outside in various types of weather. Some exposure to dust, grease, chemicals, and potential health hazards.

*This class specification is used for classification, recruitment and examination purposes. It is not to be considered a substitute for work performance standards.*

Approved by WERCCS Job Evaluation Committee Date March, 2001